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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/538,965	06/14/2005	Scott Thomasq Milner	2003B133B	4339

23455 7590 10/16/2008  
EXXONMOBIL CHEMICAL COMPANY  
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EXAMINER
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RABAGO, ROBERTO

ART UNIT	PAPER NUMBER
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1796

MAIL DATE	DELIVERY MODE
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10/16/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/538,965

**Applicant(s)**

MILNER ET AL.

**Examiner**

Roberto Rábago

**Art Unit**

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 July 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) See Continuation Sheet is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 7, 8, 12-14, 18, 19, 22, 24, 27, 28, 30, 34, 39, 46, 50-52, 54, 58, 62, 70 and 71 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

Continuation of Disposition of Claims: Claims pending in the application are 1-3,7,8,12-14,18,19,22,24,27,28,30,34,39,46,50-52,54,58,62,70 and 71.

## DETAILED ACTION

### *Election/Restrictions*

1. Claim 70, previously withdrawn from consideration as a result of a restriction requirement, is hereby rejoined and fully examined for patentability under 37 CFR 1.104.

Because all claims previously withdrawn from consideration under 37 CFR 1.142 have been rejoined, **the restriction requirement as set forth in the Office action mailed on 10/9/2007 is hereby withdrawn.** In view of the withdrawal of the restriction requirement as to the rejoined inventions, applicant(s) are advised that if any claim presented in a continuation or divisional application is anticipated by, or includes all the limitations of, a claim that is allowable in the present application, such claim may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application. Once the restriction requirement is withdrawn, the provisions of 35 U.S.C. 121 are no longer applicable. See *In re Ziegler*, 443 F.2d 1211, 1215, 170 USPQ 129, 131-32 (CCPA 1971). See also MPEP § 804.01.

### *Claim Rejections - 35 USC § 112*

2. Claims 3, 8 and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Applicants have amended the claims to remove "greater than" in each claim. The range is now indefinite because values which are both lesser and greater than 0.5 wt% may now be included, resulting in the possibility of an unlimited range. It would appear that each claim should have deleted "from" rather than "greater than", as was done in claims 1, 7 and 12.

3. Claims 3, 8 and 14 and 62 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

(a) In claims 3, 8 and 14 have been amended the claims to remove "greater than" in each claim. The range is now may include values which are both lesser and greater than 0.5 wt, resulting in an unlimited range; no support can be found in the specification as filed for such scope.

(b) No support exists for the insertion of the word "about" before "5" in amended claim 62.

### ***Double Patenting***

4. Claims 1-3, 7, 8, 12-14, 18, 19, 22, 24, 27, 28, 30, 34, 39, 46, 50-52, 58, 62, 70 and 71 are rejected on the ground of nonstatutory obviousness-type double patenting

as being unpatentable over claims 1-64 of Patent 7,332,554 for the reasons set forth in item 5 of the Office action mailed 1/11/2008.

5. Claim 54 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 10 of copending Application No. 11/009,660 for the reasons set forth in item 6 of the Office action mailed 1/11/2008.

6. Applicant's arguments filed 7/18/2008 have been fully considered but they are not persuasive. Applicants essentially argue that the formation of long chain branching and the formation of specific triad sequence distributions are affected by different polymerization process features. This argument is not contested; it is also not contested that the scope of copolymers claimed in the patent and the application are not precisely coextensive (if they were, then the rejection would be statutory double patenting). However, the issue is whether or not the ordinary skilled worker practicing the patented invention would also obtain polymers within the instantly claimed scope. On this point applicants have not offered any substantive traversal; and it is not seen how such traversal would even be possible in view of the fact that the recommended methods for making the patented copolymer and the application copolymer are essentially identical. The same methods operating on the same materials would necessarily result in the same copolymers, regardless of which particular physical parameters applicants have selected for measurement and quantification in the claims.

***Claim Rejections - 35 USC § 102***

7. Claims 1-3, 7, 8, 12-14, 18, 19, 22, 24, 27, 28, 30, 34, 39, 46, 50-52, 58, 62 and 71 are rejected under 35 U.S.C. 102(b) as being anticipated by Priola et al. (US 4,107,417).

The reference discloses in Example 2 the making of isobutylene/isoprene copolymer of PMv=80,000 using AlEtCl<sub>2</sub> as catalyst. The reference does not disclose the value of g'; however, the claimed value would appear to be inherent in view of the comparatively low molecular weight. Applicants' comparative data in Figure 5 shows that even in non-fluorinated diluents, the claimed value of g' would be expected for conventional isobutylene/isoprene copolymers of molecular weights up to at least 100,000. Accordingly, the burden of proof is shifted to applicants to show that the reference copolymer would not have the required property. Regarding applicants' numerous claims directed solely to process features in the overall product-by-process claims, there is no basis to conclude that the broad scope of such process elements would exclude the reference copolymer from the claimed scope of copolymers. The burden of proof is shifted to applicants to show otherwise.

8. Claim 70 is rejected under 35 U.S.C. 103(a) as being unpatentable over Priola et al. (US 4,107,417).

The parent claims are discussed with respect to this reference above. Missing is a recommendation to add a blending polymer. However, applicants' list of blend components includes virtually all conventional polyolefin rubbers, and therefore it would

be obvious to add at least one of said rubbers to the composition of Priola because the blending of rubber components is conventional.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roberto Rábago whose telephone number is (571) 272-1109. The examiner can normally be reached on Monday - Friday from 8:00 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Roberto Rábago/  
Primary Examiner  
Art Unit 1796

RR  
October 14, 2008